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## **Supplemental Material**

### **CERAPP: Collaborative Estrogen Receptor Activity Prediction Project**

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**Table S6:** Participant single categorical models compared to agonist antagonist and binding categorical *consensus* predictions (as the “observed response”) after the 4 correction rules were applied. It shows the number of predicted chemicals (out of the total 32k prediction set), the number of actives (out of the 4001 actives predicted by the consensus categorical model) and summary statistics based on the consensus categorical predictions.

**Figure S1:** Number of chemicals by positive concordance (agreement on actives between the included models) of the categorical binding models on the active compounds of the prediction set (32k). The positive concordance is the fraction of models predicting a certain chemical as active by the total number of models providing a prediction for that chemical.

**Figure S2:** Bar plot of the corrected categorical *consensus* for binding accuracy with variable number of literature sources from the evaluation set. The y –axis, depending on the color of the bar from the legend, represents the balanced accuracy, sensitivity or specificity.